

US 7 Local Air Ground (8)

- (a) 126.2 Mhz (Williams Field Tower/McMurdo Center/SOUTH POLE)
- (b) 340.2 Mhz (Williams Field Tower/McMurdo/SOUTH POLE)
- (c) 360.2 Mhz (McMurdo Center/South Pole Station/Byrd Surface Camp/WILLIAMS FIELD)

Williams Field Tower guards all frequencies.

US 8 GCA Air/Ground (8) ((.05))

- (a) 134.1 Mhz (Williams Field/South Pole Station)
- (b) 270.6 Mhz (Williams Field)

Approach Control at U.S. Antarctic stations with GCA facilities.

US 9 Air to Ship

- (a) 250.6 Mhz (8) ((.7))
- (b) 280.2 Mhz (8) ((.7))
- (c) 3103.5 (3) ((1))
- (d) 128.2 Mhz (8) ((.7))
- (e) 157.1 Mhz (channel 22) (9)
- (f) 381.8 Mhz (8) ((.7))
- (g) 383.9 Mhz (8) ((.7))
- (h) 5697.5 (3) ((1))

For use as directed by the OTC in helo/ship communications. Coast Guard ships and their helos and VXE-6 helos use US 9(a) for helo/ship communications in McMurdo area. Ice reconnaissance aircraft and ships use US 9(c) for long range communications and US 9(a) for line-of-sight communications. US 9(d) through (h) approved for Coast Guard ship/helo and ground party use. When working McMurdo or VXE-6 helos, US 9(a) through (c) must be used. See also US (3).

US 10 thru 13 Blank

US 14 Antarctic Broadcast (2) ((3))

- (a) 2650
- (b) 4872 (Alternate)
- (c) 5810 (Alternate)
- (d) 6397 (Alternate)
- (e) 8090
- (f) 11004
- (g) 17361.5

Half-duplex teletype circuit for passing traffic from ships and stations to McMurdo Station for entry into the AUTODIN system. McMurdo will acknowledge receipt of traffic sent via US-14 or US-17. Traffic will be prepared in JANAP 128 format. McMurdo Station will provide routing indicator guidance upon request. Temporary routing indicator assignments for ships will be provided as required.

US 15 Antarctic Ship-to-Ship Calling and Working (1) ((1))

(a) 4242

(b) 4248

(c) 6346

(d) 6362

(e) 8420

(f) 12630

For delivery of message traffic for those ships not equipped with teletype capability.

US 16	Antarctic RATT Working (on call)	((1))
Group I	(Outlying Stations send)	Group II (Ships send to McMurdo & ship/ship)
(a)	7340 (1, 2, 3)	(a) 2572 (1, 2, 3)
(b)	7750 (2)	(b) 6365.5 (1, 2)
(c)	9073 (1, 2, 3)	(c) 8292.5 (1, 2)
(d)	10235 (2)	(d) 8678 (1, 2)
(e)	12029 (1, 2, 3)	(e) 12457 (2)
(f)	12280 (1, 2, 3)	(f) 12736.5 (1, 2)
(g)	13551.5 (1, 2, 3)	(g) 16594 (1, 2)
(h)	15564 (1, 2, 3)	

Half-duplex teletype circuit for passing traffic from ships and station to McMurdo. McMurdo will coordinate and acknowledge receipt of traffic via US 14 or US 17. Traffic shall be in ACP 126 modified format. McMurdo Station will provide ACP 126 modified format guidance on a case-by-case basis and will provide routing indicator guidance on request. Temporary routing indicator assignments for ships will be provided as required.

US 17 Antarctic Common (3) (1.5 unless noted))

- (a) 2831.5
- (b) 4771.5 (Primary Field Parties)
- (c) 7996.5 (Secondary Field Parties/Secondary Outlying Stations)
- (d) 9007.5
- (e) 11554.5 (Primary Outlying Stations)
- (f) 26101.5 ((.175))

APP-IX-A-4

(with MC 1/2)

CHRISTCHURCH - ICEBERG CONTROL
Ship x mt 15899 LSB - WINDOW
Shore x mt 14700 LSB -

For communication between a field party (fixed and mobile) and its base camp, for conferences between Antarctic stations, and for passing traffic when other means are not available. During the austral summer season McMurdo and South Pole Station guard primary except when scheduled or required to shift to an alternate for working a particular field party. McMurdo will maintain a listening watch on all US 17 frequencies within personnel and equipment limitations, checking out of the net when necessary.

US 18 McMurdo to Christchurch Point-to-Point ((5))

- (a) 4012.5 (2, 3, 5, 7, 16)
- (b) 5140 (2, 3, 5, 7, 16)
- (c) 5386 (2, 3, 5, 7, 16)
- (d) 7875 (2, 3, 5, 7, 16)
- (e) 9785 (2, 3, 5, 7, 16)
- (f) 9006.5 (2, 3, 5, 7, 16)
- (g) 10130 (2, 3, 5, 7, 16)
- (h) 11460 (2, 3, 5, 7, 16)
- (i) 13680 (2, 3, 5, 7, 16)
- (j) 13874 (2, 3, 5, 7, 16)
- (k) 14767.5 (2, 3, 5, 7, 16)
- (l) 15899 (2, 3, 5, 7, 16)
- (m) 16152 (2, 3, 5, 7, 16)
- (n) 17375 (2, 3, 5, 7, 16)
- (o) 20105 (2, 3, 5, 7, 16)
- (p) 21804 (2, 3, 5, 7, 16)

US 19 Christchurch to McMurdo Point-to-Point ((10))

- (a) 5080 (2, 3, 5, 7, 16)
- (b) 7540 (2, 3, 5, 7, 16)
- (c) 7929.5 (2, 3, 5, 7, 16)
- (d) 9215 (2, 3, 5, 7, 16)
- (e) 9785 (2, 3, 5, 7, 16)
- (f) 11461.5 (2, 3, 5, 7, 16)
- (g) 11580 (2, 3, 5, 7, 16)
- (h) 12120 (2, 3, 5, 7, 16)
- (i) 14700 (2, 3, 5, 7, 16)
- (j) 14768 (2, 3, 5, 7, 16)
- (k) 16153.5 (2, 3, 5, 7, 16)
- (l) 17403 (2, 3, 5, 7, 16)
- (m) 21805.5 (2, 3, 5, 7, 16)
- (n) 21834 (2, 3, 5, 7, 16)
- (o) 22844 (2, 3, 5, 7, 16)

Half-duplex teletype circuit for passing traffic from CNSFA DET Christchurch communications facility to McMurdo Station. McMurdo will acknowledge receipt of traffic via US 18. Traffic will be prepared in JANAP 128 format. Emissions on US 18 and US 19 will normally be on two independent sidebands; lower sideband for RATT, voice or facsimile, while upper sideband is for TDM traffic.

2. Electronics Frequency Plan

USA 1 Aeronautical Navigation Aids TACAN: ((14))
Beacons: ((4))

Installation	TACAN Channel/(MHz)	Homing Beacons		Identification		
		UHF/(MHz)	LF	TACAN	UHF	LF
(a) Byrd	80 T 1167 R 1104	280.4		NBY		NBY
(b) Christchurch			274	CH		
(c) McMurdo	90 T 1177 R 1114	275.6	518	NGD		NGD
(d) South Pole	100 T 1187 R 1124	260.6		NPX		NPX
(e) Ships	10 T 971 R 1034	N/A	410 522 532 534	N/A	N/A	N/A
(f) Siple	70 T 1157 R 1094	274.0		NQU		NQU
(g) Palmer			1600	NHG		
(h) Field Parties (Portable)	75 T 1162 R 1099	230.1 (Note 1) 230.2 (Note 2) 230.3 230.4 230.5 230.6 230.7 230.8		NGD NGD NGD NGD NGD NGD NGD NGD		

Note 1 - During DF 87/88 being used for ACFT 321 recovery area D-59.

Note 2 - During DF 87/88 being used for DOWN STREAM BRAVO in Siple Coast.

TACAN and UHF Homer located at Williams Field. Ships operating independently or ships in company as designated by the OTC may use TACAN and homing beacons employing the ship-designated identifier.

USA 2 LES-9 SATCOMM:

A. LES-9

- Primary Uplink: 303.350MHZ
Downlink: 249.550MHZ
- Secondary Uplink: 303.450MHZ
Downlink: 249.650MHZ

B. INMARSAT:

Uplink: 1636.5 - 1645.0MHZ
Downlink: 1535.0 - 1543.5MHZ

C. INMARSAT TERRESTRIAL LINK

Uplink: 854MHZ
Downlink: 884MHZ

D. ATS-3

Uplink: 149.175MHZ
Downlink: 135.555MHZ

USA 3 Automatic Weather Station (1) ((.150))
401.65 mHz

USA 4 GCA surveillance/precision radar; McMurdo and South Pole Station ((.150))
(a) 9080 mHz

USA 5 GMD rawinsonde receiving set; McMurdo, Byrd and South Pole Stations
((.00025))
(a) 1680 mHz

3. Local Area Frequency Plan

USB 1 Industrial control, Disaster control and Administrative (9) ((.05 unless
otherwise noted))
(All mHz except e)
(a) 143.0 Industrial Net (McMurdo/Pole/Byrd/Siple)
(b) 143.2 VXE-6 Maintenance Net
(c) 143.4 Fuels Administrative Net, McMurdo
(d) 143.6 VXE-6 Maintenance Net
(e) 4156.5 VXE-6 Maintenance Net
(f) 148.275 Paging Network (F9)
(g) 142.6 out/139.6 in Terminal Operations Net
(h) 142.875 out 139.8 in Crash/Fire Net
(i) 142.8 Scott Base VHF Net
(j) 148.5 (.001) NSFA Det Christchurch (shared by Term Ops and A/C Maintenance)
(k) 148.7 USAP Paging (Proposed)
(l) 143.5 (S-053) Telemetry Frequency (Proposed)
(m) 143.350 out/139.350 in Field Party Repeater
(n) 140.950 Remote Fire Alarm
(o) 30.30 VXE-6 Helo Common
(p) 2272 VXE-6 Helo Common
(q) 341.0 VXE-6 Field Party
(r) 235.0 VXE-6 Field Party Locator Beacon
(s) 344.5 VXE-6 LC-130 Common
(t) 123.45 VXE-6 LC-130 Common

USB 2 Port Control (9) (all mHz)
(a) 156.80 (Channel 16) Calling and Safety (Guarded by McMurdo Operations
and McMurdo Center)
(b) 156.70 (Channel 14) Primary
(c) 156.65 (Channel 13) Secondary

Includes frequencies in the VHF-FM band designated by the FCC for use between ships
(bridge-to-bridge) and between ship and shore for the exchange of navigational and
operational information. McMurdo has portable equipment capability for channels 13,
14, 16 (guard), 21 and 22. Additionally, McMurdo has fixed equipment capability for
channels 1 thru 14, 16 and 18 thru 28.

Operation Order

CNSFA No. 1-87

USB 3 Telephone System (9) (all mHz) ((.012))

a. System A

1. 410.0 (McMurdo-McMurdo)
2. 413.0 (McMurdo-McMurdo)
3. 416.4 (McMurdo-Williams Field)
4. 419.4 (Williams Field-Williams Field)

c. System C

1. 463.2625 (Ice Runway-McMurdo)
2. 464.9125 (McMurdo-Williams Field)
3. 468.2625 (McMurdo-Ice Runway)
4. 469.9125 (Williams Field-McMurdo)

b. System B

1. 410.4 (McMurdo-Williams Field)
2. 413.4 (Williams Field-McMurdo)

4. International Frequency Plan

AA1 Distress & Calling/Search & Rescue, Worldwide

- (a) 2182 (8) Distress and calling (maritime)
- (b) 8364 (1) Life boat, life raft and survival craft
- (c) 3023.5 (1, 8) Scene of SAR
- (d) 121.5 mHz Emergency and distress
- (e) 243.0 mHz (8) Emergency and distress
- (f) 282.8 mHz (8) Scene of SAR
- (g) 500 kHz (1) ADF homing (LC-130/UH-1N), Primary SAR

AA2 International Antarctic Common (1, 2, 8, 10)

McMurdo Transmit

5867.5 ((3))
7669.5 ((3))
9828.5 ((3))
10863.5((3))
12225 ((3))
13588.5((3))
16223.5((3))

Casey Transmit

4040
6850
7922
9940
12255
14415
15845

Dumont D'Urville Transmit

7420
5450
9268
11575
14940
17695

Molodezhnaya Transmit

4010
7595
9280
9325
10350
13905
14375
14558

Frei Transmit

6600
8510
11660
12850
14470
15470

For scheduled communications between McMurdo and International Antarctic Stations.
International operating procedures shall be observed.

5. Entertainment and Morale Frequency Plan

Military Affiliate Radio System (MARS) ((1)) (1, 2, 3, 11)

APP-IX-A-8

(with MC 1/2)

<u>Frequency</u>	<u>Authorized Transmit Stations</u>
6970	Any U.S. Antarctic Station/Ship
7635	Any U.S. Antarctic Station/Ship
11402.5	McMurdo Station only
13827.5	Any U.S. Antarctic Station/Ship
13975.5	Any U.S. Antarctic Station/Ship
14470	Any U.S. Antarctic Station/Ship
14761.5	Any U.S. Antarctic Station/Ship
20998.5	Any U.S. Antarctic Station/Ship

MARS frequencies provide backup and emergency communications and enables personnel to exchange personal and morale type messages with their families in the United States. MARS frequencies are usable only on a non-interference basis with existing operational frequencies. All frequencies shall be cleared through McMurdo Station Communications Center prior to being utilized.

AFAN American Forces Antarctic Network

Radio

- (a) 404.5 MHz ((.05)) (9) Annual
- (b) 6012 (2) Austral Summer ((10)) (Proposed)
- (c) 93.9 MHz (((.010)) (9)

Television

- (a) Channel 4 McMurdo
- (b) Channel 7 Williams Field/Scott Base

TABS

- A - Radio Circuitry Requirements
- B - New Zealand RATT, CW broadcast and ship-shore schedules

APPENDIX IX TAB B

RADIO CIRCUITRY REQUIREMENTS

CIRCUIT DESIGNATOR

SHIP/STA	U S 3	U S 4	U S 5	U S 7	U S 8	U S 9	U S 14	U S 15	U S 16	U S 17	U S 18	U S 19	A A 1(1)	A A 2
CHCH			A								X		W	
MCMURDO			A	A	A	A			R	X		X	W/L	W
SOUTH POLE			A	A	A		R		O	W			W/L	
PALMER			W				R		O	W			W	
SIPLE			A				R		O	W			W	
BEARDMORE			W							W				
ICEBREAKER	W	W	W			W	R	W	O	W	W	W	W/L	
FIELD PARTIES			W							W				

LEGEND:

X - GUARD
A - GUARD DURING OPERATING SEASON
W - GUARD WHEN REQUIRED
L - LISTEN
R - COPY
O - ON CALL

NOTE 1: SOUTH POLE LISTEN ON AA 1 (d) and (e)

NOTE 2: CAD MOT Personnel manning and/or Det Christchurch equipment support only

APPENDIX IX TAB C

CALL SIGNS AND AIGS

<u>SHIP/COMMAND</u>	<u>INTERNATIONAL CALL SIGN</u>	<u>VOICE CALL SIGN</u>
USCGC POLAR STAR	NBTH	POLAR STAR
USCGC POLAR SEA	NRUO	POLAR SEA
USCGC WESTWIND	NLKL	WESTWIND
USCGC NORTHWIND	NRFJ	NORTHWIND
M/V GREENWAVE	KRHL	GREEN WAVE
M/V PAUL BUCK	KDGR	PAUL BUCK
M/V GUS W DARNELL	KCDK	GUS W DARNELL
M/V SAMUEL L COBB	KCDJ	SAMUEL L COBB
M/V RICHARD G MATTHIESEN	WLBV	RICHARD G MATTHIESEN
M/V LAWRENCE H GIANELLA	WLBX	LAWRENCE H GIANELLA

The following ships are not under the operational control of CNSFA but may be operating in Antarctic waters:

ARA GENERAL SAN MARTIN	LORM	SAN MARTIN
RRS BRANSFIELD		BRANSFIELD
R/V POLAR DUKE	VOGB	POLAR DUKE
M/S SOCIETY EXPLORER	3EYT	SOCIETY EXPLORER
M/S FUJI	JSTY	FUJI
THALA DAN	OWRX	THALA DAN
NELLA DAN	OZKC	NELLA DAN
R/V DISCOVERY		DISCOVERY
M/S WORLD DISCOVERER	S6BZ	DISCOVERER
R/V MELVILL	WECB	MELVILLE

<u>STATION</u>	<u>INTERNATIONAL CALL SIGN</u>	<u>VOICE CALL SIGN</u>
BYRD (when activated) AIR/GROUND	NBY	BYRD STATION BYRD RADIO
CHRISTCHURCH (Headquarters)		ICEBERG
CHRISTCHURCH (Comm Relay Site)	ZLK	ICEBERG CONTROL
CHRISTCHURCH (Airport)		CHRISTCHURCH RADIO
MARBLE POINT (when activated)	N/A	MARBLE POINT
MCMURDO LONG RANGE AIR/GROUND AIR/GROUND (TOWER)	NGD	MCMURDO STATION MCMURDO CENTER WILLIAMS FIELD TOWER
PALMER	NHG	PALMER STATION
SIPLE (when activated) AIR/GROUND	NQU	SIPLE STATION SIPLE RADIO
SOUTH POLE AIR/GROUND	NPX	SOUTH POLE STATION SOUTH POLE STATION
OPERATION DEEP FREEZE MOBILE	NBD APP-IX-C-1	(UNASSIGNED)

Operation Order
CNSFA No. 1-87

AMATEUR RADIO CALL SIGNS

ANTARCTIC STATIONS

<u>STATION</u>	<u>AMATEUR CALL</u>	<u>MARS CALL</u>
BYRD (when activated)	KC4USB	NNNONUZ
MCMURDO	KC4USV	NNNOICE
PALMER	KC4AAC	NNNOKMR
SIPLE	KC4AAD	NNNOICF
SOUTH POLE	KC4AAA	NNNONWB
WILLIAMS FIELD (VXE-6)	KC4USX	NNNONGQ
VOSTOK (when activated)	KC4AAE	N/A
BEARDMORE GLACIER CAMP (when activated)	KC4AAG	NNNONBG

UNITS OPERATING SOUTH OF 60 DEGREES LATITUDE:

R/V POLAR DUKE	KC4AAB	N/A
USCGC POLAR STAR	KC4USR	NNNOCTC ✓
USCGC WESTWIND	KC4USG	NNNONXO
ANTARCTICDEVROX SIX (MCMURDO)	KC4USY	N/A
ANTARCTICDEVROX SIX (ACFT)	KC4AAF	N/A

AIG 53 SQZ (COMNAVSUPPFORANTARCTICA) WEEKLY SITREP ADDRESSEES

FROM: COMNAVSUPPFORANTARCTICA
TO: COMTHIRDFLT
INFO: ASSTSECNAV RES WASHINGTON DC
USDAO WELLINGTON NZ
ANTARCTIC DIV DSIR CHRISTCHURCH NZ
COGARD ATC MOBILE AL
NAVCAMS EASTPAC HONOLULU HI
NSF POLAR WASHINGTON DC
UNSECNAV WASHINGTON DC
ANS PARAMUS NJ
COMNAVAIRPAC SAN DIEGO CA
SOUTH POLE STATION ANTARCTICA
SIPLE STATION ANTARCTICA
USCGC WESTWIND
USCGC POLAR STAR
NSF REP NEW ZEALAND CHRISTCHURCH NZ
CCGDEIGHT NEW ORLEANS LA
CCGD PORTSMOUTH VA
NSF CONTRACTOR REP PORT HUENEME CA
COMDT COGARD WASHINGTON DC//G-OIO//
COMLANTAREA COGARD NEW YORK NY//AQ//
COMNAVSUPPFORANTARCTICA REP PORT HUENEME CA
NAVSUPPFORANTARCTICA DET CHRISTCHURCH NZ
NSF REP ANTARCTICA MCMURDO ANTARCTICA
ANTARCTICDEVON SIX DET CHRISTCHURCH NZ
CDR7THTCGP FT EUSTIS VA//AFFG-C-PL//
NAVSUPPFORANTARCTICA DET MCMURDO ANTARCTICA
CCGTHIRTEEN SEATTLE WA
NAVPOlarOCEANCEN SUITLAND MD
CNO WASHINGTON DC
PALMER STATION ANTARCTICA
USCINCPAC HONOLULU HI
NAVTELSYSIC CHELTENHAM MD
COMASWINGPAC SAN DIEGO CA
COMMERCIAL REFILE CENTER ALBANY GA
SECSTATE WASHINGTON DC
NAVCAMS LANT NORFOLK VA
CINCPACFLT PEARL HARBOR HI
USCGC POLAR SEA
USCGC NORTHWIND
ASST SECDEF WASHINGTON DC
COMPACAREA COGARD ALAMEDA CA//PO//
ANTARCTICDEVON SIX
ANTARCTICDEVON SIX DET PT MUGU CA
COMASWFORTHIRDFLT FORD ISLAND HI

Operation Order
CNSFA No. 1-88

AIG 230 (COMNAVSUPPFORANTARCTICA) AIR OPERATION

FROM: COMNAVSUPPFORANTARCTICA
TO: ANTARCTICDEVROX SIX
INFO: NSF REP ANTARCTICA MCMURDO ANTARCTICA
SCOTT BASE ANTARCTICA
COMMERCIAL REFILE CENTER ALBANY GA
NAVTELSYSIC CHELTENHAM MD
NSF POLAR WASHINGTON DC
SIPLE STATION ANTARCTICA
NAVCAMS LANT NORFOLK VA
NAVSUPPFORANTARCTICA DET CHRISTCHURCH NZ
ANTARCTICDEVROX SIX DET CHRISTCHURCH NZ
NAVSUPPFORANTARCTICA DET MCMURDO ANTARCTICA
COMNAVSUPPFORANTARCTICA REP PORT HUENEME CA
SOUTH POLE STATION ANTARCTICA
NSF REP NEW ZEALAND CHRISTCHURCH NZ
ANTARCTICDEVROX SIX DET PT MUGU CA
NAVCAMS EASTPAC HONOLULU HI
ANS PARAMUS NJ

AIG 414 (ANTARCTICDEVROX SIX) FLIGHT/MISSION SUMMARY

FROM: COMNAVSUPPFORANTARCTICA
TO: ANTARCTICDEVROX SIX *
INFO: NSF POLAR WASHINGTON DC
NSF REP NEW ZEALAND CHRISTCHURCH NZ
NAVTELSYSIC CHELTENHAM MD
NAVCAMS LANT NORFOLK VA
NSF REP ANTARCTICA MCMURDO ANTARCTICA
NAVSUPPFORANTARCTICA DET CHRISTCHURCH NZ
COMNAVSUPPFORANTARCTICA REP PORT HUENEME CA
ANTARCTICDEVROX SIX DET CHRISTCHURCH NZ
NAVSUPPFORANTARCTICA DET MCMURDO ANTARCTICA
NAVCAMS EASTPAC HONOLULU HI
COMMERCIAL REFILE CENTER ALBANY GA
ANTARCTICDEVROX SIX DET PT MUGU CA

*(ENSURE CNSFA IS AN ADD-ON ACTION ADDRESSEE WHEN ADDRESSING MESSAGE TO AIG 414)

AIG 7608 (SHIP ENVIRONMENTAL OBSERVATIONS) UNDER COMNAVSUPPFORANTARCTICA OPCON
COGNIZANT AUTHORITY: COMNAVOCEANCOM BAY ST LOUIS MS

FROM: USCGC/MSR SHIP *
TO: FLENUMOCEANCEN DATA MONTEREY CA
NAVOCEANCOM GUAM
NAVWESTOCEANCEN PEARL HARBOR HI
AFGWC OFFUT AFB NE//WFO//
PACFLT WWHCCS WEATHER PEARL HARBOR HI

NOTE: THE FOLLOWING ARE REQUIRED ADD-ON INFORMATION ADDRESSEES TO AIG 7608:

INFO: NAVSUPPFORANTARCTICA DET CHRISTCHURCH NZ
MCMURDO STATION ANARCTICA
WEATHER MELBOURNE AS
WEATHER WELLINGTON NZ

* AS APPROPRIATE

AIG 7615 (AS APPROPRIATE) PASSENGER/CARGO MOVEMENT REPORT (CHRISTCHURCH/CONUS)

FROM: COMNAVSUPPFORANTARCTICA
TO: COMNAVSUPPFORANTARCTICA REP PORT HUENEME CA * +
NSF REP NEW ZEALAND CHRISTCHURCH NZ
60MAW CP TRAVIS AFB CA //DO/MA/TR/DOD//
NAVSUPPFORANTARCTICA DET CHRISTCHURCH NZ * +
22AF TRAVIS AFB CA //DOD/DOV/DOX/DOOMS//
619MASS HICKAM AFB HI //CC/DOXL/DOCP//
834ALD HICKAM AFB HI //DO/RT/DOX/DOO//
63MAW NORTON AFB CA//TR/DO//
HQ MAC SCOTT AFB IL//DOOM/DOD/LNA//
INFO: COMTHIRDFLT
COMMERCIAL REFILE CENTER ALBANY GA
NAVCAMS LANT NORFOLK VA
ANS PARAMUS NJ
NSF POLAR WASHINGTON DC
NSF REP ANTARCTICA MCMURDO ANTARCTICA
NAVSUPPFORANTARCTICA DET MCMURDO ANTARCTICA
DET 2 619 MASS CHRISTCHURCH NZ
NAVCAMS EASTPAC HONOLULU HI
NAVTELSYSIC CHELTENHAM MD
NSF CONTRACTOR REP PORT HUENEME CA
ANTARCTICDEVRON SIX

*(ORIGINATOR/ACTION ADDRESSEE AS APPROPRIATE)

+(ENSURE CNSFA IS AN ADD-ON ADDRESSEE WHEN ADDRESSING MESSAGES
TO AIG 7615)

Operation Order
CMSFA No. 1-88

AIG 7641 (SHIP ENVIRONMENTAL OBSERVATIONS) SHIPS EAST OF LONGITUDE 80 DEGREES
WEST COGNIZANT AUTHORITY: COMNAVOCEANCOM BAY ST LOUIS MS

FROM: USCGC/MS SHIP *
TO: FLENUMOCEANCEN DATA MONTEREY CA
NAVOCEANCOMCEN ROTA SP
NAVEASTOCEANCEN NORFOLK VA
AFGWC OFFUT AFB NE//WFO//
INFO: CINCLANTFLT NORFOLK VA

NOTE: THE FOLLOWING ARE REQUIRED ADD-ON INFORMATION ADDRESSES TO AIG 7641:

INFO: MCMURDO STATION ANTARCTICA
METEO BUENOS AIRES AR
METEO SOUTH GEORGIA FALKLAND ISLANDS

* AS APPROPRIATE

AIG 7652 (AS APPROPRIATE) PASSENGER/CARGO MOVEMENT REPORT

FROM: COMNAVSUPFFORANTARCTICA + *
TO: NAVSUPFFORANTARCTICA DET MCMURDO ANTARCTICA *
ANTARCTICDEVON SIX
NAVSUPFFORANTARCTICA DET CHRISTCHURCH NZ *
NSF REP ANTARCTICA MCMURDO ANTARCTICA
INFO: NSF REP NEW ZEALAND CHRISTCHURCH NZ
NSF POLAR WASHINGTON DC
NAVCAMS LANT NORFOLK VA
NSF CONTRACTOR REP PORT HUENEME CA
ANS PARAMUS NJ
ANTARCTICDEVON SIX DET PT MUGU CA
COMASWWINGPAC SAN DIEGO CA
COMNAVSUPFFORANTARCTICA REP PORT HUENEME CA *
ANTARCTICDEVON SIX DET CHRISTCHURCH NZ
NAVCAMS EASTPAC HONOLULU HI
COMTHIRDFLT
COMMERCIAL REFILE CENTER ALBANY GA
DET 2 619MASS CHRISTCHURCH NZ
NAVTELSYSIC CHELTENHAM MD
COMASWFORTHIRDFLT FORD ISLAND HI

+(ENSURE CNSFA IS AN ADD-ON ADDRESSEE WHEN ADDRESSING MESSAGE TO AIG
7652)

*(ORIGINATOR/ACTION ADDRESSE AS APPROPRIATE)

AIG 7685 (OUTLYING U.S. STATIONS) WEEKLY SITREP

FROM: COMNAVSUPFORANTARCTICA

TO: ANS PARAMUS NJ

SIPLE STATION ANTARCTICA * +

ANTARCTICDEVRON SIX

PALMER STATION ANTARCTICA * +

SOUTH POLE STATION ANTARCTICA * +

INFO: NSF POLAR WASHINGTON DC

NAVTELSYSIC CHELTENHAM MD

NAVCAMS EASTPAC HONOLULU HI

UNIVERSITY OF WISCONSIN//DEPT OF METEOROLOGY//

1226 W. DAYTON

MADISON WIS 53707

NSF REP NEW ZEALAND CHIRSTCHURCH NZ

NAVSUPFORANTARCTICA DET MCMURDO ANTARCTICA

COMNAVSUPFORANTARCTICA REP PORT HUENEME CA

ANTARCTICDEVRON SIX DET CHRISTCHURCH NZ

NAVSUPFORANTARCTICA DET CHRISTCHURCH NZ

STANFORD UNIVERSITY PALO ALTO CA//VLF 956-373-1151//

NAVCAMS LANT NORFOLK VA

ANTARCTICDEVRON SIX DET PT MUGU CA

COMMERCIAL REFILE CENTER ALBANY GA

*(ORIGINATOR/ACTION ADDRESSEE AS APPROPRIATE)

***(PROTECTS FOR NSF REP OR DET MCMURDO)

+(ENSURE CNSFA IS AN ADD-ON ADDRESSEE WHEN ADDRESSING MESSAGE TO AIG 7685)

NOTE: ADD-ON ADDEES ARE OPTIONAL BASED ON INDIVIDUAL STATION REQUIREMENTS.

Operation Order
CNSFA No. 1-88

AIG 7686 (COAST GUARD) DAILY SITREP ADDRESSEES

FROM: COMNAVSUPFORANTARCTICA
TO: USCGC WESTWIND +
USCGC POLAR STAR +
INFO: COMTHIRDFLT
CCGDTHIRTEEN SEATTLE WA
COMPACAREA COGARD ALAMEDA CA//PO//
NSF POLAR WASHINGTON DC
COGARD MLC EMD ALAMEDA CA
COGARD MLC EMD NEW YORK NY
- NSF REP NEW ZEALAND CHRISTCHURCH NZ
NAVCAMS LANT NORFOLK VA
COGARD ATC MOBILE AL
NAVPOLAROCCEANCEN SUITLAND MD
COMASWFORTHIRDFLT FORD ISLAND HI
COMLANTAREA COGARD NEW YORK NY//AO//
- NSF REP ANTARCTICA MCMURDO ANTARCTICA
- NAVSUPFORANTARCTICA DET CHRISTCHURCH NZ
USCGC NORTHWIND
CCGDEIGHT NEW ORLEANS LA
CCGDFIVE PORTSMOUTH VA
USCGC POLAR SEA
COGARD SSF SEATTLE WA
NAVTELSYSIC CHELTENHAM MD
COMDT COGARD WASHINGTON DC//G-OIO//
NAVCAMS EASTPAC HONOLULU HI
NAVOCEANO BAY ST LOUIS MS
COMMERCIAL REFILE CENTER ALBANY GA

+(ENSURE CNSFA IS AN ADD-ON ADDRESSEE WHEN ADDRESSING MESSAGE TO AIG 7678)

AIG 7758 COMMERCIAL RESERVATIONS PROCEDURES FOR MCMURDO STATION

FROM: COMNAVSUPFORANTARCTICA
TO: NAVSUPFORANTARCTICA DET CHRISTCHURCH NZ
INFO: NSF REP ANTARCTICA MCMURDO ANTARCTICA
ANS PARAMUS NJ
ANTARCTICDEVON SIX DET PT MUGU CA
NSF CONTRACTOR REP PORT HUENEME CA
NSF POLAR WASHINGTON DC
NAVTELSYSIC CHELTENHAM MD
COMNAVSUPFORANTARCTICA REP PORT HUENEME CA
NSF REP NEW ZEALAND CHRISTCHURCH NZ
COMMERCIAL REFILE CENTER ALBANY GA
NAVCAMS EASTPAC HONOLULU HI
ANTARCTICDEVON SIX
NAVCAMS LANT NORFOLK VA

AIG 9924 STATUS REPORT FOR COMMANDERS PROVIDING AUGMENT PERSONNEL FOR
OPERATION DEEP FREEZE

FROM: COMNAVSUPPFORANTARCTICA
TO: COMNAVSUPPFORANTARCTICA REP PORT HUENEME CA
INFO: NAVSUPPFORANTARCTICA DET CHRISTCHURCH NZ
3 TPT REGT
CDRUSATRASCEN FT EUSTIS VA
RAAF BASE RICHMOND AS
3 MCU
NAVCHAPGRU WILLIAMSBURG VA
NAVTELSYSIC CHELTENHAM MD
COMTHIRDFLT
NAVCAMS LANT NORFOLK VA
NZLF
SGHQ RNZAF
RNZAF WIGRAM
NAVCAMS EASTPAC HONOLULU HI

AIG 9930 (NAVSUPPFORANTARCTICA DET MCMURDO WEEKLY SITREP ADDRESSEES)

FROM: COMNAVSUPPFORANTARCTICA
TO: NAVSUPPFORANTARCTICA DET MCMURDO ANTARCTICA
COMNAVSUPPFORANTARCTICA REP PORT HUENEME CA
INFO: COMTHIRDFLT
PALMER STATION ANTARCTICA
NSF POLAR WASHINGTON DC
NAVTELSYSIC CHELTENHAM MD
CINCPACFLT PEARL HARBOR HI
UNIVERSITY OF WISCONSIN//DEPT OF METEOROLOGY//
1226 W. DAYTON
MADISON WI 53707
COMASWFOORTHIRDFLT FORD ISLAND HI
SOUTH POLE STATION ANTARCTICA
NAVCAMS EASTPAC HONOLULU HI
ANS PARAMUS NJ
NAVSUPPFORANTARCTICA DET CHRISTCHURCH NZ
ANTARCTICDEVRO SIX DET CHRISTCHURCH NZ
NAVPOLAROCEANCEN SUITLAND MD
NAVCAMS LANT NORFOLK VA
NSF REP NEW ZEALAND CHRISTCHURCH NZ
ANTARCTICDEVRO SIX DET PT MUGU CA
CNO WASHINGTON DC
ANTARCTICDEVRO SIX
USDAO WELLINGTON NZ
COMMERCIAL REFILE CENTER ALBANY GA
SIPLE STATION ANTARCTICA

Operation Order
CNSFA No. 1-88

AIG 11146 DEEP FREEZE SAAM MOVEMENT REPORTS (CHRISTCHURCH NZ/CONUS)

FROM: COMNAVSUPPFORANTARCTICA
TO: ANTARCTICDEVRON SIX
COMNAVSUPPFORANTARCTICA REP PORT HUENEME CA
NAVSUPPFORANTARCTICA DET CHRISTCHURCH NZ
NAS PT MUGU CA
INFO COMNAVMILPERSCOM WASHINGTON DC
NAVCAMS EASTPAC HONOLULU HI
ANTARCTICDEVRON SIX DET PT MUGU CA
NAVTELSYSIC CHELTENHAM MD
ANTARCTICDEVRON SIX DET CHRISTCHURCH NZ
1957ISG HICKAM AFB HI//NATCO//
NAVCAMS LANT NORFOLK VA
COMASWINGPAC SAN DIEGO CA

APPENDIX XI TAB D

SHIP'S MESSAGE REPORTS

1. Ship's Casualty Reports (CASREP). Ships are to follow the guidelines set forth in NWP-7. Ships under the operational control of CNSFA are to include CNSFA as an info addressee on all CASREPs. An OPERATIONS IMMEDIATE message precedence should be sent on all CASREPs for engineering casualties which effect the capability of the vessel to meet scheduled DEEP FREEZE operations or commitments as tasked in Appendix III.

2. Ship's Daily Situation Report (SITREP). A daily ship's SITREP will be submitted as of 2000Z while under the operational control of CNSFA. When in port (e.g. McMurdo Station or Port Lyttelton, NZ) a SITREP need only be sent for the first day of arrival, the day prior to departure, and when any significant changes occur. The following format will be used for the daily SITREP:

P PRIORITY precedence

FM: Originating ship (USCG or MSC)

TO: COMNAVSUPFORANTARCTICA
AIG 7686

INFO: CTU THREE ONE PT ELEVEN PT ONE //COMSCPAC OAKLAND CA// (for MSC vessels only
Additional addressees as appropriate.

ACCT NS-WCAB

UNCLAS //NO3100//

Subj: DF-(YR) Daily SITREP (consecutive number)/Date (local)
(example: DF-86 Daily SITREP 01/25 DEC 85)

1. 2000Z position and 0800Z anticipated position.

2. WX: Significant weather and ice conditions-

TEMP:	WIND:
SST:	WAVE:
CIG:	SWELL:
VIS:	ICE:
BARO:	

3. Fuel: Report quantity consumed and percentage remaining onboard for ship's bunkers and helicopter fuel. Initial SITREP to include quantity on board at 100% capacity (refer to page A-17, paragraph 7).

4. Significant accomplishments past 24 hours. During vessel transits include miles and speed made good for past 24 hour period. Icebreakers include miles-made-good along proposed track during past 24 hours when breaking ice.

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5. Planned operations next 24 hours.

6. Comments: Additional information as applicable to include:

a. Embarked passengers - include names of officers, enlisted and civilians with organization and destination. For science support personnel indicate their applicable science (S) event number (see Appendix VIII).

b. Bunker fuel, aviation fuel and lube oil received (in thousands of U.S. gallons) while under CNSFA operational control.

c. Status of any DEEP FREEZE cargo/retrograde which requires special handling (e.g. reefer and/or freezer items or vans holding temperature).

d. When inport, percentage cargo off-loaded, percentage retrograde cargo on-loaded and estimated time of completion of all cargo operations (50/5/221500Z).

e. Estimated times of arrival (ETA) and estimated times of departure (ETD) information and updates for intended ports of call. Confirmation of ETA should be provided at least 4 days prior to expected arrival.

7. HH-52 Air Operations (Fridays) - Include a weekly flight activity summary through 2000Z.

Example:

<u>PROJ</u>	<u>MSNS</u>	<u>HRS</u>	<u>CARGO (LBS)</u>	<u>PAX</u>	<u>RMKS</u>
N-3	2	1.2	0	0	
N-11	1	2.9	0	2	Dry Valley tour
S-169	3	4.1	0	2	Seal census
K-041	2	3.2	100	2	Cape Royds

a. The following project (PROJ) codes will be used to identify flight activity not in direct support of science:

N-3 Maintenance	N-11 VIP/DV's
N-12 Non-U.S. station fights	N-13 Training
N-14 SAR/MEDEVAC	N-16 Ice Recon
N-17 Shuttle	N-18 Miscellaneous

b. Science project event numbers (S-NSF; K-New Zealand) will be used to identify flight activity for specified science support.

c. Remarks (RMKS): DTG (ZULU) of significant events (e.g. landings at stations, Antarctic firsts, VIP movement or other major events). Include the geographical name, if known, of location and position in LAT/LONG for field party put-ins. Flight aborts.

APPENDIX IX TAB E

NEW ZEALAND RATT AND CW BROADCAST AND SHIP SHORE SCHEDULES

1. CW SHIP SHORE (SHIP CALLING)

<u>FREQUENCY</u>	<u>CALL SIGN</u>
4185.7	ZLO2
6280	ZLO3
8373	ZLO4
12559.2	ZLO5
16747	ZLO6
22243.2	ZLO7

2. SHORE ANSWERING

a. This service is termed the NZAB (NEW ZEALAND ANSWERING BROADCAST) and consists of a morse-operated call tape identified quote DE ZLO QSX A1A 4 8 16 J2B 2 4 8 16 unquote.

b. This call tape identifies ship-shore services available and will be broken to answer and work ships calling. The following frequencies operate this service:

<u>FREQUENCY</u>	<u>TIME</u>
2490.385	On Request
4260.385	Continuous
6336.885	On Request
8598.385	Continuous
12716.885	Continuous
16874.485	Continuous
22376.385	On Request

c. This broadcast is situated just below a RATT station; therefore accurate tuning is required.

3. SHIP WORKING CW

SHIP WORKING RATT (OFF LINE)

4188.5	On Request	2238.4
6283.5	0600-1800Z	413-6
8377.0	Continuous	6242.6
12565.5	On Request	8302
16754	1800-0600Z	12441.5
22270	On Request	16614.4
		22142

Ship calls on CW WORKING then shifts to RATT WORKING on acknowledgement from ZLO via NZAB. Procedure for ship-shore RATT is as follows:

- Ship calls ZLO on calling frequencies.
- Ship answered via NZAB
- Ship indicates working frequency and after acknowledgement from ZLO, ship shifts to working frequency.
- Ship calls and sends traffic.
- ZLO receipts for traffic.

APPENDIX XI TAB E

Medical Evacuation (MEDEVAC) Report Format

PRIORITY

FM SHIP OR STATION

TO COMNAVSUPPFORANTARCTICA

INFO PARENT COMMAND OR ACTIVITY

OTHER APPROPRIATE ACTIVITIES

NAVSUPPFORANTARCTICA DET CHRISTCHURCH NZ

ACCT NS-WCAB

UNCLAS //N04630//

SUBJ: MEDICAL EVACUATION REPORT

1. FOL PNT(S) WILL BE MEDEVACED ON FAA (or estimated date and time when evacuation will be made and mode of transportation if other than FAA)

A. NAME, RANK/RATE, SSN (USN, USCG, USA, ETC)

B. AGE OF PATIENT

C. DIAGNOSIS, CONDITION AND PROGNOSIS

D. SPECIAL PREPARATION REQUIRED BY MCMURDO STATION TO RECEIVE PATIENT

E. REQUIREMENT FOR MEDICAL ATTENDANT (if none, state no medical attendant required)

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4. CW FLEET BROADCAST Z13W

a. These facilities operate every 2 hours on a time share basis commencing 0200Z. It is a morse-operated broadcast run at 18wpm. During periods of no traffic, a call tape is generated. The following single operator and double operator periods exist:

<u>S.O.P.</u>	<u>D.O.P.</u>
0200-0400Z	0200-0400Z
0600-0800Z	0600-0800Z
1000-1200Z	1000-1200Z
2200-0001Z	1400-1600Z
	1800-2000Z
	2200-0001Z

<u>CALL SIGN</u>	<u>FREQUENCY</u>	<u>AVAILABILITY</u>
ZLP	2732	ON REQUEST
ZLP2	4250	CONTINUOUS
ZLP3	6435.5	ON REQUEST
ZLP4	8678	CONTINUOUS
ZLP5	12943.5	CONTINUOUS
ZLP6	17127.2	CONTINUOUS
ZLP7	22407	ON REQUEST

b. Watch is set at least 4 hours in advance, if possible, by signal to NAVCOMMSTA WAIORU INFO COMAUCK NZDEF NAVY, routing indicator Z13W-RZYXICW.

5. Call sign ZLO is used for ship/shore and ZLP for broadcast. These call signs both originate at NAVCOMMSTA WAIORU.

APPENDIX XI TAB F

Injury Report Format

ROUTINE OR PRIORITY PRECEDENCE, AS DETERMINED BY THE SEVERITY OF THE INJURY

FM SHIP OR STATION

TO COMNAVSUPPFORANTARCTICA

INFO PARENT COMMAND OR ACTIVITY

OTHER APPROPRIATE ACTIVITIES

NAVSUPPFORANTARCTICA DET CHRISTCHURCH NZ

ACCT NS-WCAB

UNCLAS //NO6310//

SUBJ: INJURY REPORT

A. NAME, RANK/RATE, SSN, (USN, USCG, USA, etc)

B. TIME AND DATE OF INJURY

C. BRIEF STATEMENT OF THE CIRCUMSTANCES

D. BRIEF STATEMENT OF THE TREATMENT GIVEN

E. STATE WHETHER FULL OR PARTIAL, TEMPORARY OR PERMANENT DISABILITY WILL BE INCURRED.

APPENDIX XI TAB G

Medical Admission Report Format

ROUTINE OR PRIORITY PRECEDENCE, AS APPLICABLE

FM SHIP OR STATION

TO COMNAVSUPFORANTARCTICA

INFO PARENT COMMAND OR ACTIVITY

OTHER APPROPRIATE ACTIVITIES

NAVSUPFORANTARCTICA DET CHRISTCHURCH NZ

ACCT NS-WCAB

UNCLAS //N06320//

SUBJ: SICK LIST ADMISSION REPORT

- A. NAME, RANK/RATE, SSN, (USN, USCG, USA, etc)
- B. AGE OF PATIENT
- C. TIME (local) AND DATE OF ADMISSION
- D. DIAGNOSIS
- E. CONDITION, PROGNOSIS, INTENTION OF MEDICAL DEPARTMENT REPRESENTATIVE

APPENDIX XI TAB H

Medical Services Report

ROUTINE OR PRIORITY PRECEDENCE, AS APPLICABLE

FM SHIP OR STATION

TO COMNAVSUPPFORANTARCTICA

INFO PARENT COMMAND OR ACTIVITY

OTHER APPROPRIATE ACTIVITIES

ACCT NS-WCAB

UNCLAS //N06300//

SUBJ: Medical Services Report

1. Number of sick call visits:

USN: USCG: USA: U.S. CIVILIANS: OTHER CIVILIANS:

2. Number of prescriptions filled:

3. Number of x-rays exposed:

4. Number of Lab procedures performed:

5. List type of injuries/accidents:

6. List any problem areas:

7. List of cold related injuries:

8. List cases of snowblindness:

APPENDIX XI TAB I

Medical End of Season Report

ROUTINE OR PRIORITY PRECEDENCE, AS APPLICABLE

FM SHIP OR STATION

TO COMNAVSUPPFORANTARCTICA

INFO PARENT COMMAND OR ACTIVITY

OTHER APPROPRIATE ACTIVITIES

ACCT NS-WCAB

UNCLAS

SUBJ: End of Season Report

1. Total number of sick call visits.
2. Total number of admissions to the Sick List.
3. Total number of sick days.
4. Total number of patients transferred for further treatment.
5. Total number of x-ray films exposed.
6. Total number of laboratory procedures performed.
7. Total number of prescriptions filled.
8. Total number of aviation groundings.
9. Total number of accidents.
10. Total number of dental procedures performed.
11. Total number of minor surgical procedures performed.
12. Average number of personnel on board.
13. Problem areas relating to the general health of personnel.
14. Problem areas relating to hygiene and sanitation.
15. Summary of special medical problems encountered, the treatment and result of treatment.

16. Reports of surgical situations encountered, including the physical and psychological condition of survivors, and adequacy of survival equipment and rations.

17. Total number of cases of cold injuries and snow blindness.

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c. Significant items relative to the status of communications may be included in Situation Reports (SITREPS). SITREP requirements are contained in Appendix XI.

d. Recommendations for improvement of equipment, procedures, or facilities affecting readiness or efficiency are encouraged.

4. Reporting Vital Information

a. Certain information is vital to operational safety in Antarctica. Types of information under this category are:

Emergency and distress traffic
Storm warnings
Terminal and enroute weather forecasts
Aircraft departures, position, and arrival reports
Field party reports

b. Any circuit authorized by this Annex will be used to relay vital information when normal means of communications fail.

c. All message traffic shall be handled according to precedence except that messages containing information in the category of subparagraph 4.a shall have priority over other types of messages of the same precedence and shall be handled in the order listed.

5. Circuit Priorities. DEEP FREEZE circuit priorities are as follows:

<u>Priority</u>	<u>Circuit</u>	<u>Priority</u>	<u>Circuit</u>
1	US 5	5	US 14/16
2	US 17	6	AA 2
3	US 18/19	7	AA 1(This circuit has first priority during SAR OPS)
4	US 15		

6. Call Signs

a. Calls signs are listed in Appendix IX.

b. International call signs will be used for call-up and for maintaining all but voice communications. With the exception of Christchurch (ICEBERG), ship and station names will be used in lieu of call signs on all external voice circuits. Assigned calls signs shall be utilized on amateur radio and MARS circuits.

7. Plain Language Address. Messages sent from or to units or activities in Antarctica will use plain language addresses. Unless otherwise directed, task organization designators, when assigned shall not be used.

8. Address Indicator Groups. Use and composition of AIG's under the cognizance of CNSFA are contained in Appendix XI. (AIG 7608 and 7641 are not under CNSFA cognizance).

9. Message Drafting and Releasing Guidelines. Specific instructions for proper message preparation are contained in references (a) and (b). Some important points that bear directly on communications efficiency are as follows:

a. Closely examine messages to evaluate the necessity for electrical transmission in preference to letters or speedletters.

b. Assign the lowest possible precedence which will ensure delivery within the time limit required; assign lower precedence to information addressee(s) when feasible. Use of dual precedence must be considered for all messages with an information addressee when other than ROUTINE precedence is assigned to the action addressee.

c. Limit the number of addressees to those with a valid need for the information, and consider the inclusion of all necessary addressees so as to preclude future readdressals.

d. Use maximum brevity feasible, without loss of clarity.

e. Avoid lengthy resumes of references.

10. Accounting Symbol. All message traffic originated in support of the National Science Foundation are class "B" messages. All personal telegrams are class "D" or class "E" messages.

a. The accounting symbol "NS-WCAB" is required in format line 10 on all class "B" messages. USCG and MSC contracted ships will use this accounting symbol upon INCHOP to CNSFA (approximately 60 degrees south latitude).

b. The accounting symbol "NA-CNRF" is required in format line 10 on all class "D" and class "E" messages.

11. Minimize Instructions. The McMurdo/Christchurch trunk and intra-Antarctic circuits are not subject to MINIMIZE restrictions. When MINIMIZE is imposed elsewhere, it is the responsibility of the message originator to determine if a message is required and, if so, whether all addressees outside New Zealand and Antarctica require the information via electrical means. If other than electrical transmission will suffice, the information shall be incorporated into NAVGRAM or letter format. CNSFA guidelines for MINIMIZE are contained in reference (c).

12. Electromagnetic Interference.

a. Close cooperation is necessary to prevent harmful electromagnetic interference to scientific programs and communications circuits. Communications and scientific personnel should confer on matters of mutual interference and shall report unresolved problems to CNSFA via appropriate channels.

b. Interference due to ^{ANOTHER} ~~another~~ station occupying the same or adjacent frequency band or channel should be reported to CNSFA using format outlined in ref (i).

13. Electromagnetic Radiation. Commands and activities located at McMurdo Station shall submit annual electromagnetic emission reports IAW reference (j).

On automatic distribution for coast guard of NSC-originated general messages. McMurdo Station automatically delivers the below listed unclassified general messages to tenant military commands and terminated ships:

ALCOM, ALCOMPAC, ALCOMPAC (P), ALFOODACT, ALMIACT, ALNAV, ALNAVSTA, ALPACFLT, ALTHIRDFLT, JAFPUB, NAVACT, NAVOP, NAVPLAD, PACOMACT, ALSVCACT, THIRDFLT.

15. Frequencies

a. Frequencies are in accordance with Appendix IX.

b. Frequency usage reports are required from outlying stations in order that CNSFA may submit quarterly frequency usage reports as required by NTP-6. Outlying stations submit, on a quarterly basis, for consolidation by CNSFA the transmit frequencies used in the following format:

Tx Frequency	*Hours Used	Type Emission (TTY, SSB)
--------------	-------------	-----------------------------

*The actual time that the transmitter is keyed. Round hours off to nearest hour.

c. The report should be submitted to reach CNSFA NLT than:

05 Oct
05 Jan
05 Apr
05 Jul

16. Guard Shifts. Guard shift messages shall be prepared in accordance with reference (d). All guard shifts to either a local message center or another broadcast will normally be scheduled to coincide with the start of a new radio day. MSC ship guard shifts shall be in accordance with reference (e). When submitting guard shifts, ensure that McMurdo Station and NSFA DET Christchurch are informed as well as other appropriate communications activities. Ensure communications guard requirements (ZKP List) are listed in guard shifts. When shifting guard to McMurdo Station, do not indicate temporary routing indicator assignments in item Charlie of the shift messages. Due to unreliable satellite communications in the area of the McMurdo ice pier, all ships will shift their guard over-the-counter to McMurdo Station communications center.

17. Ship Broadcasts

a. CNSFA does not require assigned ships to copy any specific broadcast. Unless otherwise directed, assigned ships enroute to New Zealand and Antarctica may copy the most reliable broadcast available. DEEP FREEZE ships should be equipped to copy 50 and 75 baud broadcasts as the need arises. MSC ship communications shall be in accordance with reference (e).

b. When in New Zealand and Antarctic areas, ships are authorized to copy New Zealand RATT and CW broadcasts. Schedules are contained in Appendix IX.

c. The Antarctic (AR) Broadcast (US-14) increases the speed of delivery of traffic originating within DEEP FREEZE. Ships may copy the AR Broadcasts at their discretion.

d. When two or more ships are in the same port or underway in company, guard ship arrangements for broadcasts may be made by either the OTC or senior Commanding Officer.

18. Over-the-counter Message Service. Over-the-counter message service is available at McMurdo upon request. NSFA DET Christchurch can assume the guard for ships while in Port Lyttelton. Ships are responsible for making message pick-up and delivery arrangements with NSFA DET Christchurch or McMurdo Station when either of these activities have their guard. In addition, NSFA DET Christchurch will provide a briefing service on New Zealand Communications facilities.

19. Ship-to-shore Communications

a. COGARD COMMSTA San Francisco will provide, on request, long range communications support for ships either by direct methods or guard ship arrangements for MSC ships via escorting cutters. Ships are encouraged to utilize and maintain communications with COGARD COMMSTA San Francisco to the maximum extent and as far south as reliable propagation conditions permit.

mc 1/2 b. Ships may pass traffic through McMurdo Station for relay to AUTODIN via US-16. All traffic must be prepared IAW ref (k).

c. When ships not equipped with radioteletype shift their guard to McMurdo Station, the escorting USCG ship will assume relay ship responsibility utilizing US-15. Working frequencies from Appendix IX and schedules shall be determined by mutual agreement between MSC and USCG ships involved. McMurdo Station will provide coordination as required.

d. Commonwealth radio stations at Canberra, Australia and NAVCOMMSTA's Waiouru and Awarua, New Zealand may be used for passing ship-to-shore traffic. Experience in operating with those stations has been highly satisfactory. NAVCOMMSTA Waiouru ship-to-shore frequencies are listed in Appendix IX.

mc 1/2 e. Communications between Palmer Station and Coast Guard ships will be maintained on US-17 and/or US-16, or as directed by CNSFA. Communications between Palmer Station and MSC vessels will be on US-17.

f. The general calling and reply frequency used between Campbell Island and ships is 2182 Khz (emission 6A3B). Once contact is made, transfer to 2162 Khz (emission 6A3B). Time for first schedule between the ship and island should be at 1910 hours NZST at least 24 hours before the ship is due to reach the island. Failing contact at this time, call at 0710 and 1910 hours until radio contact is established. Once contact is made, schedules may be arranged by mutual agreement.

20. Antarctic Broadcasts. The AR Broadcast (US-14) emanates from McMurdo Station and consists of 75 Baud radio teletype for U.S. Antarctic Stations and ships operating within range of the broadcasts. Messages are numbered consecutively commencing on the first day of each month. Normal broadcast procedures are not observed on the AR Broadcast and number continuity is not required. Traffic addressed to individual units will be delivered by the receipt method.

(Independent Side Band Signal And 75 Baud Time Division Multiplex)

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21. Weather Communications

a. Annex A sets forth requirements for reporting weather information and outlines weather and ice information services available.

b. The prompt receipt of weather information is vital to the safety of DEEP FREEZE operations. Weather traffic (observations and forecasts) shall be handled consistent with paragraph 4. Normal procedures are modified for U.S. Antarctic circuits to the extent that the proword "weather" shall be included in the call-up to indicate that the calling station has weather traffic.

c.; Change to read "FACSIMILE (FAX) transmission on US-18 includes surface and upper air (400 mb) analyses, and, when required, satellite and ice information charts. McMurdo Station FAX transmissions commence daily at 0645Z and 1845Z, with a 5 minute sync/test signal for proper tuning and adjustments, followed by FAX transmissions at 0700Z and 1900Z. Ships and stations should contact McMurdo Station prior to scheduled transmit times for frequency information. Ships and stations experiencing difficulty in copying signal on frequencies in use may coordinate with McMurdo Station for alternate frequencies."

d. Ice reconnaissance reports will be transmitted from aircraft to ships on either US-3 or US-9. Ships will be notified in advance by CNSFA of the estimated time of arrival of ice reconnaissance missions in their areas and the initial contact frequency.

22. Distress Search and Rescue

a. Regardless of the manner received, distress traffic shall be passed by any means available to flight following centers of both McMurdo and Christchurch Radio (Christchurch Radio is manned by New Zealand CAA personnel only during flight operations between McMurdo and Christchurch). If the distress call is other than a U.S. unit in Antarctica, the distress traffic shall also be passed on AA2 directly to the parent station for relay, with information copy to CNSFA.

b. Stations receiving distress calls shall maintain communications with stations requesting assistance, until relieved by another station rendering assistance, until the emergency is overcome or until notified by the station requesting assistance that services are no longer required.

c. International Distress and Calling Net is designated AA1. Frequencies are listed in Appendix IX. Ships under way independently shall set listening watches on these frequencies, less AA1 (c) and (f). Guard ship arrangements may be made by the OTC for ships in company. McMurdo will listen on AA1 (a) and (b). McMurdo Station will guard AA1 (d) and (e) during the austral summer operating season.

d. For communication and coordination of rescue activities, AA1 frequencies should be used by air and surface craft regardless of service affiliation.

e. Stations and units which are involved in a SAR situation and which have good communications on a particular frequency should not shift frequency solely to be on SAR frequency unless such a shift is directed by higher authority.

f. During SAR operations, all involved units and stations will maintain normal circuits in addition to the appropriate SAR circuits. Should equipment limitations preclude the above, stations and units will attempt to maintain the following normal circuits:

- | | |
|--------------------|--|
| (1) Ships | Ship-shore circuit |
| (2) Aircraft | Flight-following circuit |
| (3) Shore Stations | Ship-shore/flight-following circuits and, as appropriate |
| | US-17, 18, and 19 |

23. Aircraft Communications

a. Primary and alternate long range air-to-ground communications are on US-5, local air-to-ground communications at U.S. stations in the Antarctic are on US-7 and US-8. Local air-to-ship communications are on US-3 and US-9.

b. When operating between Christchurch and McMurdo, aircraft will operate on primary Operation DEEP FREEZE frequency 8997 Khz, secondary 13251 Khz, with Christchurch Radio North of 60° South and McMurdo Center south of 60° South. Aircraft not able to maintain contact on Operation DEEP FREEZE frequencies will shift to MWARA frequencies as listed in Pacific, Australia and Antarctica enroute supplement and charts. Position reports and other traffic passed on MWARA frequencies will then be passed by landline to Christchurch Radio.

c. Aircraft proceeding to rendezvous with field parties will establish communication with the field party on US-5(a).

d. Helicopters operating in the McMurdo/Williams Field area will contact Williams Field Tower on US-7(b). Helicopters proceeding to Coast Guard ships in the McMurdo area will contact ships on US-9(a).

e. Ships in the McMurdo area will advise McMurdo directly on USB-2 of helicopter departures and arrivals. UHF and VHF air/ground circuits may be used as alternates.

f. Helicopters providing support to NZARP may contact Scott Base, Vanda Station and NZARP field parties on 5400 Khz.

24. Wirenotes. The use of wirenotes for official, and semi-official matters or informal requests for the exchanges of information is prohibited.

25. Field Party Communications. Field party communications are thoroughly discussed and procedures outlined in reference (f).

26. Press Communications. Strict adherence to reference (g) will be maintained in processing all press traffic.

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27. USDAO Communications. USDAO organizations are provided message delivery service by the Diplomatic Telecommunications Service (DTS). Immediate precedence messages addressed to activities served by DTS facilities will not be delivered during other than normal working hours unless the drafter places the caveat "IMMEDLREQ" on the face of the message followed by the plain language address of the effect activity. The caveat "IMMEDLREQ" will not be transmitted. The operating signal ZZK shall be inserted in format line four followed by the routing indicator(s) for whom immediate delivery is requested.

28. EFTO Procedures. In accordance with reference (h) messages to and from CNSFA and Coast Guard icebreakers assigned to DEEP FREEZE operations are exempted from EFTO procedures.

APPENDIX IX TAB A

FREQUENCY PLAN

Frequencies listed are in kilohertz (kHz) unless otherwise indicated. Numbers listed in parentheses immediately below are cited throughout this frequency plan to indicate authorized emissions. Authorized power outputs in kilowatts are shown in double parentheses. Attention is invited to amplifying notes throughout this Appendix.

<u>Note</u>	<u>Emission</u>	<u>Description</u>
(1)	100HA1A	CW manual morse telegraphy
(2)	1K24F1B	100 WPM (75 baud) single channel RATT
(3)	3K00J3E	Voice SSB suppressed carrier
(4)	2K04AZA	1020 Hz Homer Beacon
(5)	4K00F3C	Facsimile
(6)	6K00A3E	2 independent sidebands for voice
(7)	6K00B9W	2 independent sidebands for composite transmission
(8)	6K00A3E	AM voice
(9)	3K00B8E	FM voice
(10)	1K08F1B	67 WPM (50 baud) single channel RATT
(11)	2.8F3	Television, slow scan (MARS)
(12)	M5.25A5	Television, video
(13)	750F3	Television, audio
(14)	50P9	Tacan
(15)	F9	Paging
(16)	3K00J7B	Audio tones SSB suppressed carrier

1. General Frequency Plan

US 1 and US 2 blank

US 3 Ship Tactical

(a) 2026.4 (3) ((1)) Secondary maneuvering and towing

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CNSFA No. 1-87

- mc 1/2
- | | | |
|---------------|--------|----------------------------|
| (b) 3248.4 | (1, 3) | ((1)) Ships' Common |
| (c) 277.8 Mhz | (8) | ((.7)) Primary maneuvering |
| (d) 385.0 Mhz | (8) | ((.7)) Primary information |

For use at the discretion of the OTC. Coast Guard ships underway independently maintain guard on US 3(c). The OTC may designate guard ships for ships underway in company. Aircraft desiring to make unscheduled contacts with Coast Guard ships may use US 3(c) when within UHF range. The OTC may authorize use of US 3(c) for helo/ship communications in lieu of US 9.

- | | | |
|------|---------------------|-------|
| US 4 | Ship Conference (3) | ((1)) |
| (a) | 3320.4 | |
| (b) | 8295.6 | |
| (c) | 12430.6 | |

Authorized for long range communications between ships operating south of latitude 60 degrees south.

- | | | |
|------|-----------------------------|-------|
| US 5 | Long Range Air/Ground(3) | ((1)) |
| (a) | 8998.5 Primary | |
| (b) | 11256.5 Tertiary | |
| (c) | 13252.5 Secondary | |
| (d) | 4719.5 (Alternate, on-call) | |
| (e) | 5727.5 (Alternate, on-call) | |
| (f) | 6709.5 (Alternate) | |
- mc 1/2

McMurdo, South Pole and Christchurch guard US 5 (a). Christchurch will maintain guard on US 5(c) and McMurdo will maintain listening watch on US 5(c). When guard is shifted to secondary, a listening watch will be maintained on primary. The U.S. stations will set guard on primary one hour prior to arrival of scheduled flights and will maintain guard until aircraft has arrived or flight has been cancelled. Only information pertaining to flight safety will be passed on this circuit except in the case of field parties unable to use US 17.

US 6	BLANK
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BRAVO

Simplex AFTS SECURE

225-399.975 MHZ

tone MOD RATE

TAPB CAPABLE

